

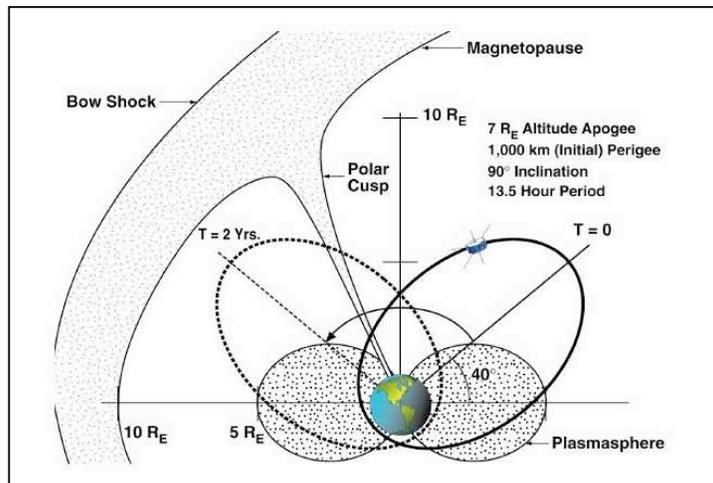
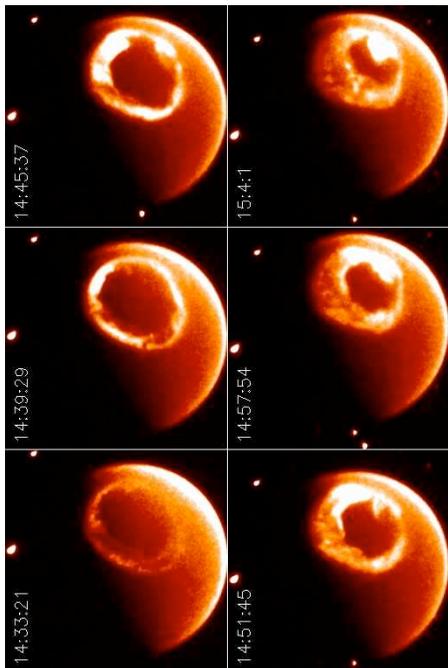
This series of math activities will help students understand some of the real-life applications of mathematics in the study of the Sun and Earth as a system. Through math and reading activities, students will learn:

- How to search for trends and correlations in data
- How to extract the average, maximum and minimum from data
- How to use scientific notation to work with very large and small numbers
- How to use a scale drawing to estimate the sizes of an aurora
- How to use the Pythagorean Theorem to calculate magnetic field strength
- How to use simple equations to convert raw data into physical quantities

This booklet was created by the NASA, IMAGE satellite program's Education and Public Outreach Project.

Writers and Reviewers:

Dr. Sten Odenwald (NASA/IMAGE)
Dr. Ayodela Aina (Cheyney University)
Ms. Susan Higley (Cherry Hill School)
Mr. Bill Pine (Chaffey High School)



A series of images (left) of the Northern Lights from space taken by the IMAGE satellite. The satellite orbits Earth in an elliptical path (above), which takes it into many different regions of Earth's environment in space.

For more classroom activities about aurora and space weather, visit the IMAGE website at:

<http://image.gsfc.nasa.gov/poetry>